

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application; please amend the claims as follows:

1. (Original) A device for measuring temperature, the device comprising:
a housing;
a temperature-responsive element supported relative to the housing, the element operable to sense temperature and move in response to temperature changes;
a first inductive assembly component fixed relative to the housing; and
a second inductive assembly component operatively and movably positioned relative to the first inductive assembly component, the second inductive assembly component being driven by movement of the temperature-responsive element, the movement of the second inductive assembly component relative to the first inductive assembly component generating a change in a local eddy current pattern corresponding to the sensed temperature.
2. (Original) The device of claim 1, wherein a current at a particular point in a sensing circuit is proportional to the temperature changes causing the temperature-responsive element to move.
3. (Original) The device of claim 1, further comprising a circuit board comprising the first inductive assembly component.
4. (Original) The device of claim 3, wherein the circuit board comprises a processor responsive to generated eddy current patterns to generate a signal representative of sensed temperature.

5. (Original) The device of claim 4, wherein the processor determines the movement of the temperature-responsive element based on the generated eddy current patterns and associates the movement with a temperature to generate the signal.

6. (Original) The device of claim 1, wherein the temperature-responsive element comprises a first portion generally fixed relative to the housing and a second portion displaceable relative to the first portion, wherein the second portion drives the second inductive assembly component.

7. (Original) The device of claim 6, further comprising a visual indicator movably positioned relative to the housing and driven by the second portion of the temperature-responsive element to indicate temperature.

8. (Original) The device of claim 1, wherein the second inductive assembly component comprises a gear with a pitch ratio larger than that of the temperature-responsive element.

9. (Original) The device of claim 8, wherein the gear comprises a protuberance that operates as an inductive target in the inductive assembly.

10. (Original) The device of claim 8, wherein the pitch ratio of the gear is approximately fifteen times larger than that of the temperature responsive element.

11-37. (Canceled)